

ADVERTISEMENT SERVICING SYSTEM USING E-MAIL ARRIVAL NOTIFYING
PROGRAM AND METHOD THEREFOR

BACKGROUND OF THE INVENTION

1. Field of the Invention

The present invention relates to an advertisement servicing system using an electronic mail (e-mail) arrival notifying program and a method thereof. More particularly, the present invention relates to an advertisement servicing system using an e-mail arrival notifying program, in which when an e-mail is received from a particular e-mail server designated by a user, an e-mail arrival notifying program having an animation character with predetermined advertising data is automatically executed to allow the user to immediately view the corresponding e-mail, when the user views the corresponding e-mail, the server that provides the e-mail arrival notifying program, rewards the user for his/her viewing of advertisement by accumulating some points on the user's account, and simultaneously makes the user connect to the advertiser's web page for the corresponding advertising.

2. Description of the Related Art

In general, the Internet, which is an open network configured for any one to freely connect to a counterparty's computer by using a common protocol, that is, Transmission Control Protocol (TCP)/Internet Protocol (IP), anywhere around the world, allows transmission of literal data as well as transmission of multimedia data with the development of compression techniques, that is, a variety of services such as e-mail, file

transfer, World Wide Web (WWW) and so on can be made available through the Internet.

As using the Internet has rapidly been on an increase all over the world, the Internet has become increasingly popular as important strategic tools for increasing efficiency and productivity of almost all industrial parts. Also, since new business opportunities over the Internet are continuously being created and business areas are also on an increase, Internet business enterprises are also gradually increasing.

In other words, according to the recently increasing tendency of Internet businesses, there has been rapidly increasing sites providing various contents such as Internet advertising, Internet broadcasting, on-line gaming, Internet newspaper/magazine, data searching service, portal service, electronic commerce and so on.

Among those sites, a great number of sites have each e-mail server that provides members with their own accounts and predetermined repository spaces so that a computer user can communicate on-line with another remote computer users through e-mail.

Also, the computer users may use e-mail service after registering as members of an Internet Service Provider (ISP), rather than to sites providing the above-described e-mail service, to then be provided with their own accounts.

As described above, although the number of sites providing e-mail services are greatly increased, the respective computer users must frequently connect to the corresponding sites to view an e-mail message directed to the his/her own e-mail account.

Thus, recently, even if the user does not connect to the corresponding site, an e-mail client program, by which e-mail arrival can be automatically notified, has been developed and used.

However, the above-described conventional e-mail client program simply provides

a function of notifying that an e-mail has arrived to each user but cannot benefit by any rewards according to the use of the e-mail client program.

Since the conventional e-mail client program is generally developed by a site of providing e-mail services to then be provided only to members of the corresponding site,
5 the users cannot selectively use their desired e-mail service.

SUMMARY OF THE INVENTION

To solve the above-described problems, it is an object of the present invention to provide an advertisement servicing system using an e-mail arrival notifying program, by
10 which a user can immediately identify the arrival of an e-mail message such that, when the e-mail message is received from a particular e-mail server specified by a user, an e-mail arrival notifying program having an animation character with predetermined advertising data is automatically executed, and a method thereof.

It is another object of the present invention to provide an advertisement servicing
15 system using an e-mail arrival notifying program, by which in the case that by the e-mail arrival notifying program, a user identify the arrival of an e-mail message sent from a particular e-mail server, predetermined points are accumulated on the corresponding user's account by the server that provides the e-mail arrival notifying program in reward for the user's viewing of advertisement in the e-mail message, and simultaneously the user is made
20 to connect to the advertiser's web page for the corresponding advertising, and predetermined cash or merchandise depending on the accumulated pints is offered to the corresponding user, and a method thereof.

To accomplish the first object of the present invention, there is provided an

advertisement servicing system using an electronic mail (e-mail) arrival notifying program, the system including a communication network for connecting a plurality of communication circuits to allow data communication; a plurality of e-mail servers for providing a plurality of users who have registered as members with accounts and
5 predetermined repository spaces, and rendering services of transmitting/receiving e-mail messages to/from the plurality of users; a server computer for creating a plurality of animation characters with advertising data presented by a plurality of advertisers to then construct a database thereof and simultaneously creating an e-mail arrival notifying program having the animation characters to then construct a database thereof, receiving e-mail read data, analyzing the advertising data viewed by the users, and accumulating
10 predetermined points on each user's account; and a plurality of user computers for downloading and installing the e-mail arrival notifying program from the server computer through the communication network, automatically executing the e-mail arrival notifying program to then display the animation character on a screen for user's e-mail viewing when
15 the e-mail of the corresponding user is received by an e-mail server designated by the user among the plurality of e-mail servers, creating the e-mail read data and outputting the same to the server computer when the corresponding user views the e-mail addressed to himself/herself by the animation character, and when the user's e-mail viewing is completed, automatically executing a communication program to proceed to
20 communication accessing to a web page of an advertiser who has presented the corresponding advertising data.

To accomplish the second object of the present invention, there is provided an advertisement servicing method using an e-mail arrival notifying program comprising the

steps of a) creating animation characters with advertising data presented by a plurality of
advertisers by a server computer and constructing an e-mail arrival notifying program
having animation characters as a database; b) storing member registration data input by a
plurality of users connected for communication through a communication network,
5 downloading the e-mail arrival notifying program having the animation characters to a
corresponding user computer according to the user's request and installing the program on
the computer; c) executing the e-mail arrival notifying program upon receipt of the
corresponding user's e-mail to a particular e-mail server designated by the user and
displaying the animation character with predetermined advertising data; d) generating e-
10 mail read data according to the user's e-mail viewing to output the same to the server
computer and executing a communication program upon completion of the user's e-mail
viewing to proceed to communication accessing to a web page of an advertiser who has
presented the corresponding advertising data; and e) analyzing the advertisement viewed by
the users based on the e-mail read data generated by the user's e-mail viewing, and
15 accumulating predetermined points on each user's account.

BRIEF DESCRIPTION OF THE DRAWINGS

The above object and advantages of the present invention will become more
apparent by describing in detail a preferred embodiment thereof with reference to the
20 attached drawings in which:

FIG. 1 is a schematic block diagram of an advertisement servicing system using an
e-mail arrival notifying program according to an embodiment of the present invention;

FIG. 2 is a detailed block diagram of a server computer shown in FIG. 1;

FIG. 3 is a schematic block diagram of an advertisement servicing system using an e-mail arrival notifying program according to another embodiment of the present invention;

FIG. 4 is a flow chart showing in detail the operation of an advertisement servicing method using an e-mail arrival notifying program according to the present invention; and

FIGS. 5 through 8 are flow charts showing in detail the operations of the respective sub-routines shown in FIG. 4.

DESCRIPTION OF THE PREFERRED EMBODIMENTS

An advertisement servicing system using an e-mail arrival notifying program according to embodiments of the present invention will now be described in detail with reference to the accompanying drawings.

FIG. 1 is an advertisement servicing system using an e-mail arrival notifying program according to an embodiment of the present invention.

As shown in FIG. 1, a communication network 10, for example, wired/wireless Internet, connects communication circuits among a plurality of e-mail servers 20, a plurality of user computers 30 and a server computer 40 to allow data communication relating to e-mail transmission/reception and e-mail arrival notification.

The plurality of e-mail servers 20 provide a plurality of users who have registered as members with accounts and predetermined repository spaces, and renders services of transmitting/receiving e-mail messages to/from the plurality of users.

The plurality of user computers 30 perform communication accessing with the server computer 40 through the communication network 10 and then download and install

an e-mail arrival notifying program having an animation character with predetermined advertising data. When the e-mail of the corresponding user is received by one e-mail server designated by the user among the plurality of e-mail servers 20, the plurality of user computers 30 automatically execute the e-mail arrival notifying program to then display the animation character with the advertising data on a screen for user's e-mail viewing.

The plurality of user computers 30 create e-mail read data and output the same to the server computer 40 when the corresponding user views the e-mail addressed to himself/herself by the animation character with the advertising data displayed on the screen. When the e-mail viewing is completed, the plurality of user computers 30 automatically execute the communication program incorporated in the computer to proceed to communication accessing to a particular web page of an advertiser who has presented the corresponding advertising data.

The server computer 40 creates a plurality of animation characters with the advertising data offered by a plurality of advertisers and an e-mail arrival notifying program having the animation characters to then construct a database thereof, respectively. Also, upon request by the plurality of user computers 30 connected for communication, the server computer 40 downloads the e-mail arrival notifying program to the corresponding user computer 30. Then, the server computer 40 receives the e-mail read data created when the user reads the e-mail message using the e-mail arrival notifying program from the plurality of user computers 30, analyzes the advertising data viewed by the users, and then accumulates predetermined points on each user's account.

Here, the server computer 40 provides the corresponding user computer 30 with the e-mail arrival notifying program having an animation character with particular

advertising data when a plurality of users select their preferred advertising data, for example, advertisement copy, logo, commercial music (CM) and the like, and their preferred animation characters, being not intended as a restriction, and may provide the corresponding user computer 30 with animation characters with another advertising data
5 periodically, for example, every day or every week, independent of user's selection.

Also, the server computer 40 may perform advertisement targeted to the corresponding field according to the user profile, for example, territory, occupation, age and so on, using the e-mail arrival notifying program.

Further, once the above-described e-mail arrival notifying program, which is a
10 program stationed on a random access memory (RAM), is set to network connection when it is downloaded from the server computer 40 and installed on the computer, it can remain connected to the network while the power of the computer is on, even through the program is not executed by separate key manipulation.

Also, according to the e-mail arrival notifying program, the service of
15 automatically generating data concerning the corresponding user's e-mail read status and read time to then send an e-mail message relating to the data back to the e-mail sender, may be performed when the user reads the e-mail message addressed to himself/herself. In other words, unlike the conventional e-mail read status notification service in which the service program is installed on the e-mail server, the e-mail arrival notifying program
20 according to the present invention program is installed on the user computer 30.

The server computer 40 can further increase the utilization efficiency of the corresponding program, including schedule management, for the benefit of a plurality of users using the e-mail arrival notifying program, and can provide a function of

automatically entering schedules of user's interested fields, for example, movie release schedules, concert schedules and so on, thereby attaining additional advertising effects.

FIG. 2 is a detailed block diagram of the server computer 40 shown in FIG. 1.

As shown in FIG. 2, an advertising server 42 creates animation characters with text, logo and commercial music presented by a plurality of advertisers and stores the same on a database. Also, the advertising server 42 produces an e-mail arrival notifying program having the animation characters and stores the same on a database. Further, upon receipt of an e-mail arrival notifying program download request signal from the plurality of user computers 30, the advertising server 42 outputs the e-mail arrival notifying program stored on the database to the corresponding user computer.

A customer relationship management (CRM) server 44 stores on a database member registration data input by a user who intends to use the e-mail arrival notifying program having animation characters. Whenever the e-mail read data, generated when viewing the e-mail received from a particular e-mail server 20 using the e-mail arrival notifying program downloaded from the advertising server 42, is input through the communication network 10, the CRM server 44 accumulates predetermined points on the corresponding user's account in reward for the user's advertisement viewing, analyzes the user's read advertising data and then stores the analysis result data in a database.

The CRM server 44 offers cash or merchandise to a user as a prize when the corresponding user's accumulated points exceed a predetermined reference level, and offers analysis result data for users' viewed advertising data to advertisers according to the advertisers' request.

A communication controller **46** receives the e-mail arrival notifying program download request signal from the plurality of user computers **30** connected for communication through the communication network **10** to then output the same to the advertising server **42**, outputs the e-mail arrival notifying program input from the advertising server **42** to the corresponding user computer **30**, receives the e-mail read data, generated when e-mail messages are viewed, from the plurality of user computers **30**, to then output the same to the advertising server **42**, and outputs the point data accumulated for each user in reward for the user's advertisement viewing to the corresponding user computer **30** in accordance with the user's request.

FIG. 3 is a schematic block diagram of an advertisement servicing system using an e-mail arrival notifying program according to another embodiment of the present invention.

As shown in FIG. 3, a communication network **100** connects communication circuits among a plurality of user computers **200**, a plurality of affiliated server computers **300** and a server computer **400** to allow data communication relating to e-mail transmission/reception, e-mail arrival notification, and advertising analysis.

The plurality of user computers **200** perform communication accessing with the server computer **400** or affiliated server computers **300** that provide e-mail service through the communication network **100**, which will later be described, to perform member registration, and then downloads and installs an e-mail arrival notifying program having an animation character with predetermined advertising data. Also, when the e-mail of the corresponding user is received from the affiliated server computers **300** or the server computer **400** that have performed member registration, the user computers **200** automatically execute the e-mail arrival notifying program to then display the animation

character with the advertising data on a screen.

Also, when the corresponding user views the e-mail addressed to himself/herself, the corresponding user computer **200** generates e-mail read data and outputs the same to the affiliated server computers **300** or server computer **400**. Then, when the e-mail viewing is completed, the user computer **200** automatically executes the communications program to proceed to communication accessing to a particular web page of the advertiser who has presented the corresponding advertising data.

The plurality of affiliated server computers **300** create a plurality of animation characters with advertising data presented by a plurality of advertisers to then construct a database thereof, and simultaneously downloads the e-mail arrival notifying program having the animation characters from the server computer **400** to be described later to then construct a database thereof. Also, the plurality of affiliated server computers **300** endow a plurality of users registered as members with their own accounts and predetermined repository spaces, and simultaneously downloads to the corresponding user computer **200** the e-mail arrival notifying program offered from the server computer **400** established in an affiliated relationship.

Also, the plurality of affiliated server computers **300** render services of allowing a plurality of users to transmit/receive e-mail messages to/from one another, analyze advertisement based on the e-mail read data generated when the users view the e-mail messages using the e-mail arrival notifying program, and then output the analysis result data to the server computer **400**.

Here, the plurality of affiliated server computers **300** may receive from the server computer **400** the combined advertisement analysis result data by users who use the

respective affiliated server computers **300**, thereby independently executing advertisement planning and implementation suited for the corresponding site.

The server computer **400** creates a plurality of animation characters with advertising data presented by a plurality of advertisers to then construct a database thereof, and simultaneously creates an e-mail arrival notifying program having the animation characters to then construct a database thereof. Also, the server computer **400** provides the plurality of affiliated server computers **300** with the e-mail arrival notifying program having animation characters and downloads to the corresponding user computer **200** the e-mail arrival notifying program according to the request of the plurality of user computers **200** connected for communication through the communication network **100**.

Also, the server computer **400** receives from the plurality of user computers **200** the e-mail read data generated when the users read e-mail messages using the e-mail arrival notifying program, analyzes the advertisement viewed by the users, accumulates predetermined points on each user's account, receives advertisement analysis result data performed independently by the respective affiliated server computers **300**, to then generate combined analysis result data for the users' viewed advertisement based on the result of advertisement analysis performed by the server computer **400** itself and the result of advertisement analysis performed independently by the respective affiliated server computers **300**, and then provides the generated analysis result data to the plurality of advertisers and the affiliated server computers **300**.

In other words, unlike the prior art in which an advertising system is independently constructed by a site that provides advertising services, advertising data is presented from a plurality of advertisers and then advertisement is performed, according to

the present invention, the e-mail arrival notifying program and advertising analysis system, targeted for existing members, are implemented by the server computer 400, without separately constructing a new system, thereby providing advertising services suitable for members' characteristics, simultaneously offering the advertising services to many users in a short time and effectively attaining analysis data based on members' advertisement viewing.

Next, the advertisement servicing method using the e-mail arrival notifying program according to an embodiment of the present invention will be described in detail by referring to the system shown in FIG. 1

FIGS. 4 through 8 are flow charts showing in detail the operations of the advertisement servicing method using the e-mail arrival notifying program according to the present invention.

First, animation characters with advertising data presented by a plurality of advertisers are created by the server computer (40 of FIG. 1) and an e-mail arrival notifying program having animation characters are constructed as a database to start an e-mail arrival notification service (step S10).

Then, the server computer 40 stores member registration data input by a plurality of users connected for communication through the communication network (10 of FIG. 1), downloads the e-mail arrival notifying program having animation characters to the corresponding user computer (30 of FIG. 1) according to the user's request and then installs the program on the computer (step S20), which will now be described in detail.

Referring to FIG. 5, the plurality of users who intend to use the e-mail arrival notifying program perform communication accessing to the server computer 40 through the

communication network **10** to perform a log-in procedure (step **S21**). Here, in the case of newly registered users, the user enters data necessary for member registration according to a predetermined format available from the server computer **40**. Then, the server computer **40** stores the member registration data input by the user in a database.

5 After the user who has connected for communication performs the log-in procedure, it is determined whether or not the e-mail arrival notifying program having animation characters is requested by the corresponding user (step **S22**). If the e-mail arrival notifying program having animation characters is requested, the server computer **40** outputs the plurality of animation characters constructed in the form of a database to the
10 corresponding user computer (step **S23**). In other words, the animation characters constructed in the form of a database are provided to the users so as to select one or more animation characters among the plurality of animation characters offered by the server computer **40**.

 Thereafter, it is determined by the server computer **40** whether or not the
15 corresponding user's desired animation character is selected by the user (step **S24**). If the user's desired animation character is selected, the e-mail arrival notifying program having the corresponding animation character is downloaded to the user computer **30** (step **S25**). Then, the user installs the e-mail arrival notifying program having the corresponding animation character downloaded from the server computer **40**, on the computer (step **S26**).

20 Next, the e-mail arrival notifying program is executed to set program configurations for notifying e-mail arrival, such as selection of a particular e-mail server, selection of a desired animation character or user profile input (step **S27**). Then, the e-mail arrival notifying program is executed according to the program configurations set by the

corresponding user (step **S28**).

Now, upon the corresponding user's e-mail arrival at the particular e-mail server **20** designated by the user after the user installs the e-mail arrival notifying program having animation characters with advertising data, the program provided from the server computer
5 **40**, through the above-described routine **S20**, the e-mail arrival notifying program is executed to then display the animation character with predetermined advertising data inserted on the screen (step **S30**), which will now be described in detail.

Referring to FIG. 6, it is continuously checked by the e-mail arrival notifying program installed on the computer **30** whether or not an e-mail message of the
10 corresponding user has arrived at the particular e-mail server **20** designated by the user (step **S31**).

It is determined whether or not the confirmation data that notifies that the corresponding user's e-mail has arrived, is input from the particular e-mail server **20** (step
15 **S32**). If the confirmation data is input, the e-mail arrival notifying program is executed to display the animation character with predetermined advertising data on the screen to notify the user of the e-mail arrival (step **S33**).

Here, the animation character displayed on the screen includes particular advertising text or logo, sometimes with commercial music.

After performing the procedure of notifying that an e-mail has arrived through the
20 above-described routine **S30**, according to the e-mail arrival notifying program, e-mail read data is generated by the corresponding user's e-mail viewing and then output the generated data to the server computer **40**, and the communication program is executed upon completion of the user's e-mail viewing to then perform communication accessing to the

web page of the advertiser who has presented the corresponding advertising data (step **S40**), which will now be described in detail.

Referring to FIG. 7, it is determined whether or not the user who has viewed the animation character with advertising data displayed on the screen selects e-mail viewing (step **S41**). If yes, the e-mail addressed to the corresponding user is displayed on the screen so that the user can read the e-mail message (step **S42**).

Then, it is determined whether or not the user's e-mail viewing is completed (step **S43**). If yes, e-mail read data for notifying the server computer **40** that the corresponding user has viewed the predetermined advertising data displayed with the animation character, is generated (step **S44**).

Thereafter, the e-mail read data generated by the e-mail viewing is output to the server computer **40** (step **S45**), and then the communication program installed on the computer **30** is executed to perform communication accessing to the web page of the advertiser who has presented the corresponding advertising data (step **S46**).

After performing the communication accessing to the web page of the advertiser through the step **S46** as described above, the user can purchase a particular advertised commodity or others by electronic commerce and can obtain more detailed product information.

If the e-mail read data generated when the user views the e-mail is output from the particular user computer **30** through the above-described routine **S40**, the server computer **40** analyzes the number of advertisements exposed to the users, types of advertisements and so on, based on the e-mail read data generated by the user's e-mail viewing, and accumulates predetermined points on each user's account in reward of user's advertisement

viewing (step **S50**), which will now be described in detail.

Referring to FIG. 8, it is determined by the server computer **40** whether the e-mail read data of notifying that predetermined advertising data is viewed by the corresponding user when the user receives an e-mail message, is input from the plurality of user computers **30** (step **S51**).

As the result, if it is determined that the e-mail read data is input, the server computer **40** analyzes the number of advertisements exposed to users, types of advertisements and the like, by a plurality of pieces of advertising data, based on the e-mail read data input from the plurality of user computers **30**, and stores the analysis result in a database (step **S52**). Then, the server computer **40** accumulates predetermined points on each user's account in reward for the user's viewing of advertising data (step **S53**).

Thereafter, the server computer **40** determines whether the accumulated points exceed a predetermined reference level (step **S54**). If the points accumulated by user exceed the predetermined reference level, cash or merchandise is offered to the corresponding user (step **S55**).

After analyzing the number of advertisements exposed to users through the step **S52**, if the analysis result data for advertisement is requested by a plurality of advertisers that have presented the advertising data, the server computer **40** extracts analysis result data for the users' advertisement viewing, stored in the database, and offers the analysis result data to the corresponding advertiser.

Then, if confirmation of points accumulated in reward for user's advertisement viewing through the step **S53** is requested by the corresponding user, the server computer **40** provides the corresponding user computer **30** with the points accumulated up to now.

As described above, according to the advertisement servicing system using the e-mail arrival notifying program of the present invention, the arrival of an e-mail message addressed to a user is followed up on a real-time basis using the e-mail arrival notifying program, the animation character with predetermined advertising data is immediately
5 executed and displayed on a screen, and then the corresponding user is automatically notified of e-mail arrival. Thus, since it is not necessary for the user to periodically connect to a particular e-mail server, the e-mail service through the Internet can be conveniently utilized.

Also, since the server computer measures/analyzes the number of advertisements
10 exposed to the users who have installed the e-mail arrival notifying program, and accumulates points for the users' advertisement viewing, the user can be advantageously rewarded by cash or merchandise from the server computer according to the achievement of advertisement viewing using e-mail reception.

Further, since predetermined advertising data is offered to the corresponding user
15 whenever an e-mail arrives and the users are exposed to advertisements more frequently than general Internet advertising, a plurality of advertisers can also benefit by advertising effects. Also, since advertising data is displayed only when an e-mail arrives and the advertising data is not provided while the users read their e-mail messages, the users can favorably view the advertisement without a repulsive feeling like a spam for junk mails,
20 which further promotes the advertising effects.

While the present invention has been particularly shown and described with reference to preferred embodiments thereof, it will be understood by those skilled in the art that various changes in form and details may be made therein without departing from the

spirit and scope of the invention.